



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/556,710

11/11/2005

Stefan Lidbrink

P16894-US1

3686

27045 7590 08/26/2008  
ERICSSON INC.  
6300 LEGACY DRIVE  
M/S EVR 1-C-11  
PLANO, TX 75024

EXAMINER

DOAN, PHUOC HUU

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

08/26/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/556,710	<b>Applicant(s)</b> LIDBRINK, STEFAN	
	<b>Examiner</b> PHUOC H. DOAN	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11, 12 and 14-20 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 12, 16-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 14, 15 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 06/05/08 have been fully considered but they are not persuasive.

Applicant argues, Hunt does not disclose registering position related data comprising the locations for mobile users (MS) together with what service is used by each user in terms of bit rate; and, creating an estimation of the traffic density within the cell as a function of said position related data, and selecting an optimal site for a new base station as a function of said position related data or said traffic density.

In response, Hunt clearly disclose the same feature with registering position related data comprising the locations for mobile users (MS) together with what service is used by each user in terms of bit rate; and creating an estimation of the traffic density within the cell as a function of said position related data, and selecting an optimal site for a new base station as a function of said position related data or said traffic density based on the control channel and mobile device where the position of mobile device related the user data to number of cells based on control sub-channel management will require high data rates, but it will be sent in a packet format such as short blocks of data, rather than continuous transmission (par

[0022-0024]), and also clearly shows the macro cell BS 104 may also instruct the chosen pico cell BS 108 to vary transmission parameters such as data rate to modify the quality of the chosen link based on the position related data to allow roaming users to connect directly to their home network for control ([0029-0031], [0034]).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 11-12, 16-18, and 20** are rejected under 35 U.S.C. 102(e) as being anticipated by **Hunt (US Pub No: 2003/0013452)**.

**As to claim 11**, Hunt discloses a method in a cellular mobile telecommunication system for cell planning and preparing for a cell split “**Fig. 1, items 106, 104; a plurality of pico cells**” when a cell tends to get congested or overloaded (page 1, par. [0006]), said method comprising the steps of: registering position related data comprising the locations for mobile users (MS) together with what service is used

by each user in terms of bit rate (page 2, par.[0022-0024]; “**control channel and mobile device where the position of mobile device related the user data to number of cells based on control sub-channel management will require high data rates, but it will be sent in a packet format such as short blocks of data, rather than continuous transmission**”); and, creating an estimation of the traffic density within the cell as a function of said position related data (page 3 par. [0029-0031]; “**the macro cell BS 104 may also instruct the chosen pico cell BS 108 to vary transmission parameters such as data rate to modify the quality of the chosen link based on the position related data**”); and selecting an optimal site for a new base station as a function of said position related data or said traffic density (page 3, par [0034]; “**to allow roaming users to connect directly to their home network for control based on the best signal to SIR**”).

As to claim 12, 17, Hunt further discloses the method of claim 11, further comprising the step of registering the path losses experienced on the radio channels of the mobiles (page 3, par [0029]; “**path losses based on the measurement of Signal to Interference Ration (SIR)**”).

**As to claim 16**, Hunt discloses a cell planning tool for preparing for a cell split “**Fig. 1, items 106, 104; a plurality of pico cells**” in a cellular telecommunication system, comprising: a control network for registering the location of mobile stations rate (page 2, par.[0023-0024]; “**control channel and mobile device where the position of mobile device related the user data to number of cells based on control sub-channel management**”); means for registering the services used by the mobile stations; and, means for, based on the location and service data, estimating the traffic density of the cell (page 3 par. [0029-0031]; “**the macro cell BS 104 may also instruct the chosen pico cell BS 108 to vary transmission parameters such as data rate to modify the quality of the chosen link based on the position related data**”); and means for selecting an optimal site for a new base station as a function of said position related data or said traffic density (page 3, par [0034]; “**to allow roaming users to connect directly to their home network for control based on the best signal to SIR**”).

**As to claim 18**, Hunt further discloses the cell planning tool of claim 16, wherein an optimal location for a new site is established in a cell planning system node (page 3, par. [0033-0034]).

**As to claim 20**, Hunt discloses a cellular telecommunication system comprising base stations and mobile stations in communication with each other in a cell under supervision of a control network including a cell planning system node which collects data from the telecommunication system relating to the location of the mobile stations (page 2, par. [0023-0025]; **“in Fig. 2, the cellular network providing more effective management of a radio link the system and a mobile station based on the cell structure and allowing a communication link to be split between two types of cells, such that control data is passed over a control sub channel, and cover the user moving around without the need for an excessive number of handovers between cells”**), their path losses on their radio channels and the services they use, and wherein said cell planning system node comprises data collecting and calculation equipment which predicts an optimal place for a new base station as a function of said location, path loss or service data **“page 3, par. [0034]; to allow roaming users to connect directly to their home network for control when users moving into new base station such a hand over, and allow roaming users to connect directly to their home network for control based on the best signal to SIR”**).

***Allowable Subject Matter***

3. **Claims 14-15, 19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUOC H. DOAN whose telephone number is 571-272-7920. The examiner can normally be reached on 9:30 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VINCENT HARPER can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/  
Supervisory Patent Examiner, Art Unit 2617

Application/Control Number: 10/556,710  
Art Unit: 2617

Page 9

/PHUOC DOAN/  
08/21/08